A Citizen's Guide to Idaho's Surface Water Quality Rules

Idaho's water quality rules are set forth in Chapter 58.01.02 of the Idaho Administrative Code, "Water Quality Standards and Wastewater Treatment Requirements." The following summary describes the general contents of the chapter to help you find the components of most interest to you. While reading, you'll see numbers in parentheses at the end of sentences that tell you which section or subsection in the actual rules you can read for details.

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Helpful Hint
Section 003 provides a list of definitions to help you understand key terms used in the rules.

I. Background

Idaho's Water Quality Standards and Wastewater Treatment Requirements describe the rules and standards established to protect human and aquatic health as related to surface water quality, creating a system of safeguards used to regulate pollutants discharged to waters of the State. The Idaho Department of Environmental Quality (DEQ) oversees development, implementation, and enforcement of these rules ***(001, 002)***.

These rules do not apply to either water rights or to the right to divert public waters of the State of Idaho and put them to a beneficial use, such as irrigation, watering livestock, mining, or other activities ***(050.02)***. Water rights are apportioned based on an application/permit/license procedure overseen by Idaho's Department of Water Resources.

II. Public and Stakeholder Involvement

The rules identify three opportunities for public and stakeholder involvement: (1) the Continuing Planning Process that describes on-going planning requirements of the State's Water Quality Management Plan ***(50.03)***, (2) convening Basin and Watershed Advisory Groups ***(052)***, and (3) stakeholder involvement through a wastewater advisory committee at DEQ ***(413)***.

Idaho's Administrative Procedure's Act provides all state agencies with additional requirements for public involvement in rulemaking, and the Clean Water Act does the same for policies specific to water quality (e.g., triennial review of state water quality standards). It is also DEQ's policy to involve the public in any guidance the agency develops.

As a state agency, DEQ serves the people of Idaho and encourages citizens to be informed and involved in making a positive difference for Idaho's environment. The public can participate in DEQ's water quality management process in many ways, from simply keeping informed to serving on a committee, such as a Watershed or Basin Advisory Group, a groundwater advisory committee, or a negotiation rulemaking committee. Public involvement is actively sought during rulemaking, developing guidance documents, monitoring and evaluating water bodies, and water body improvement and restoration activities, such as creating and implementing TMDLs.

Please visit the following links for more information:

- Current Rulemaking Activity: http://www.deq.idaho.gov/rules/deq_rulemaking.cfm
- Public Comment Opportunities: http://www.deq.idaho.gov/public/comment.cfm

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Key Term: Surface Water

All water open to the atmosphere (e.g., rivers, lakes, reservoirs, streams, impoundments, seas, estuaries) and all springs, wells, or other collectors that are directly influenced by surface water.

III. Beneficial Uses and Antidegradation

DEQ sets water quality standards in two ways: (1) by establishing criteria for specific water bodies, and (2) by establishing general narrative and numeric criteria that apply to all surface waters of the State. Designating "beneficial uses" allows DEQ to regulate the water quality of a specific water body based on its unique characteristics (i.e., size of the water body, species present, etc.), a process described in more detail below. General surface water quality criteria are described in section IV of this document.

In general, the rules protect beneficial uses that depend on public surface waters of the State ***(050.03)***. The standards in the rules are designed to ensure that water quality is protected so that existing beneficial uses are maintained, and that water quality does not degrade beyond associated thresholds (also called "antidegradation").

Chemical, physical (aquatic habitat) and biological parameters are used to determine if a water resource is meeting the water quality standards necessary to ensure that it is "meeting the standards and criteria and that a healthy, balanced biological community is present." ***(053)***

Key Terms: Beneficial Uses and Designated Uses

A ***beneficial use*** describes an activity, ecosystem, or value that a surface water body supports, including:

- Recreational activities:
  - "Primary contact" activities might involve immersion in, and likely ingestion of, water. Examples: swimming, water skiing, and skin diving.
  - "Secondary contact" activities could result in occasional ingestion of water. Examples: Fishing, boating, and wading.
- Aquatic life: The plant and animal species that live in water
- Wildlife habitats: The plant and animal species that depend on surface water bodies (but may not live in the water)
- Water supply: Agricultural, domestic (drinking water), and industrial
- Aesthetics: Natural visual beauty of the resource

A ***designated use*** is a beneficial use assigned to a specific water body in Idaho's water quality rules. Uses may "exist," or be present, in a water body regardless of designation in the rules. These ***existing uses*** must also be protected.

A. Designated Beneficial Uses by Location

Several categories of surface water beneficial uses are defined in Section ***100***, which, in turn, dictates the water quality criteria that apply to particular water bodies ***(210, 250, 251, 252 & 253)***. The use(s) for which waters in Idaho are to be protected are designated in tables, grouped by basins, as follows (a map is provided in Section ***109*** and on the next page):

- Panhandle Basin ***(110)***
- Clearwater Basin ***(120)***
- Salmon Basin ***(130)***
- Southwest Basin ***(140)***
- Upper Snake Basin ***(150)***
- Bear Basin ***(160)***

B. Water-Quality Impaired Waters

Water bodies not meeting applicable standards are considered to have impaired water quality. Every two years, DEQ is required to develop an "Integrated Water Quality Monitoring and Assessment Report" (Integrated Report). The Integrated Report combines two reporting requirements mandated by the Clean Water Act, the 303(d) List and the 305(b) Report. Under section 303(d), Idaho must identify water bodies that are not meeting state water quality standards or supporting beneficial uses.

The Integrated Report guides development and implementation of water quality improvement plans, which includes taking steps to identify sources of pollution, implementing pollution control strategies, seeking advice from local Basin Advisory Groups (present in each basin), and continued water quality monitoring. If water quality still does not meet applicable standards, DEQ is required to set a Total Maximum Daily Load (TMDL), or limit, for the pollutant(s) causing impairment ***(054)***.

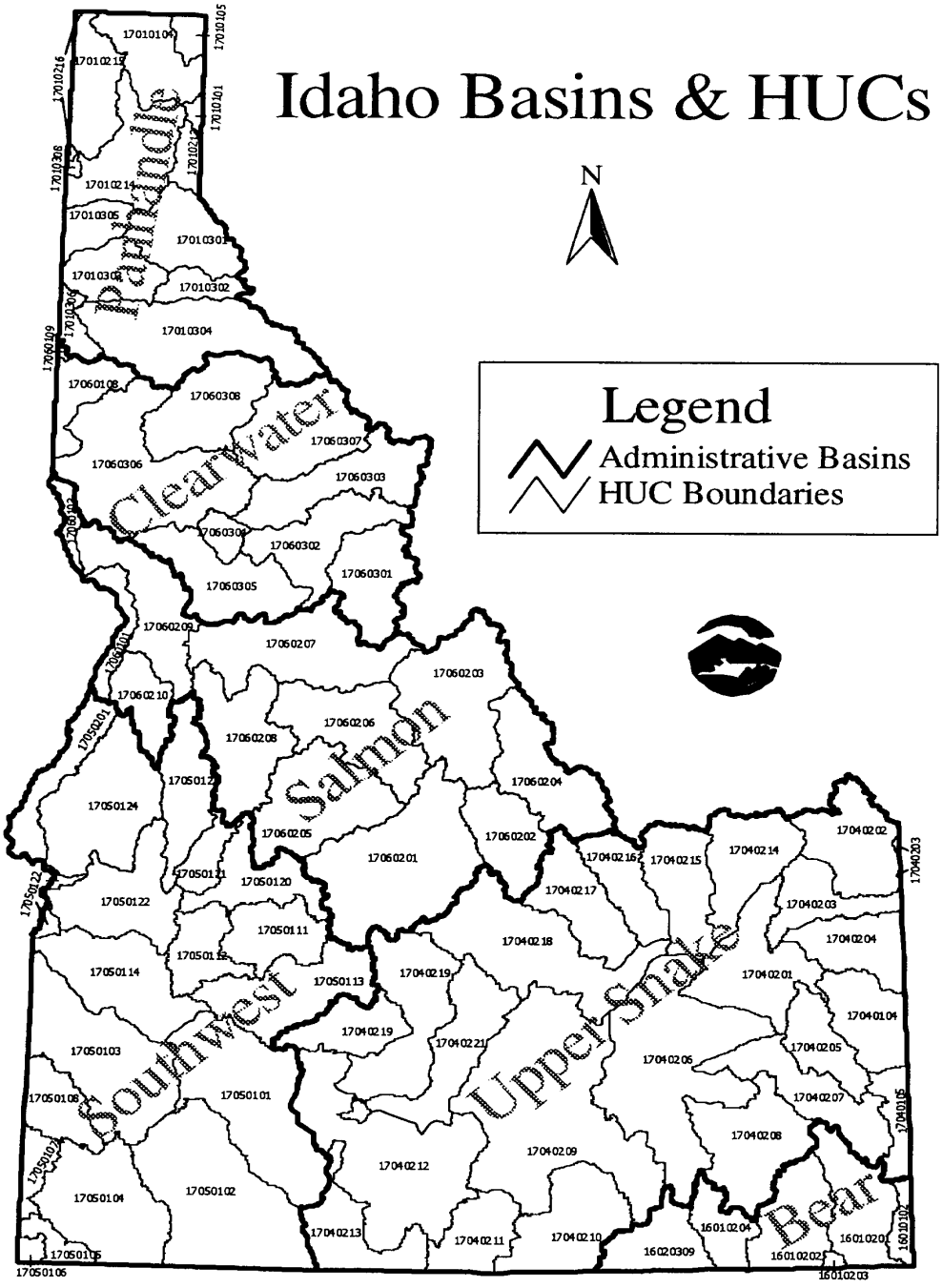
IV. General Surface Water Quality Standards

In addition to identifying designated uses and associated water quality standards for particular water bodies, DEQ develops general surface water quality criteria that apply to all surface waters of the State ***(200)***. These narrative criteria regulate the following materials:

- Hazardous materials ***(200.01)***
- Toxic substances ***(200.02)***
- Deleterious materials ***(200.03)***
- Radioactive materials ***(200.04)***
- Floating, suspended, or submerged matter ***(200.05)***
- Excess nutrients ***(200.06)***
- Oxygen-demanding materials ***(200.07)***
- Sediment ***(200.08)***
- Natural conditions ***(200.09)***

Key Term: Water Body

A water body is the smallest unit used in the rules to identify Idaho waters. Water bodies are given Water Body Identification Numbers (WBIDs) and these are nested within larger hydrologic units, identified by Hydrologic Unit Codes (HUCs). Within the six Idaho basins there are 84 HUCs and nearly 2,700 WBIDs.


Idaho Basins & HUCs
N
Legend
Administrative Basins
HUC Boundaries
Panhandle
Clearwater
Salmon
Southwest
Upper Snake
Bear

V. Use-Specific Water Quality Criteria

In addition to the general narrative criteria described above, use-specific numeric criteria are provided as follows:

- Priority Toxics for aquatic life, recreation, and domestic water uses ***(210)***
- Aquatic Life Use Criteria, including pH, temperature, dissolved oxygen, and ammonia ***(250)***
- Recreation Use Criteria for bacteria ***(251)***
- Water Supply Use Criteria ***(252)***
- Wildlife and Aesthetics Use Criteria ***(253)***

Most of these criteria are numeric, setting measurable thresholds for acceptable water quality and forming the foundation for water quality-based limits on pollutant discharge.

VI. Non-Point Runoff and Point Sources of Water Quality Pollutants

Meeting water quality standards requires controlling pollutants from both non-point runoff and point sources ***(070)***.

A. Non-Point Runoff

To help control non-point runoff, state agencies have developed best management practices, or BMPs, as tools, techniques, and measures to minimize water quality impacts associated with certain activities (350). BMP programs have been developed for the following activities:

- Forest practices (IDAPA 20.02.01)
- Solid waste management (IDAPA 58.01.06)
- Individual/Subsurface sewage disposal (IDAPA 58.01.03)
- Stream channel alterations (IDAPA 37.03.07)
- Exploration and surface mining (IDAPA 20.03.02)
- Dredge and placer mining (IDAPA 20.03.01)
- Dairy farming (IDAPA 02.04.14)

Key Terms: Non-Point Runoff and Point Sources

- ***Non-point*** runoff results from an activity that deposits pollutants incidental to the primary activity on a geographic scale that would be impractical to treat with conventional wastewater treatment technologies. Examples: Mining, grazing, or water runoff from storms or other weather-related events.
- A ***point source*** is any discernable, discrete source of water pollution, such as a pipe, ditch, or tunnel, linked to a discharger. Example: Discharge from municipal wastewater treatment plants, industrial facilities, or fish hatcheries.

B. Point Sources of Discharge

Pollutant discharge from a point source is regulated by one or more of the following measures:

- A National Pollutant Discharge Elimination System (NPDES) permit issued by the Environmental Protection Agency (see also ***210.04***)
- An Idaho Board of Environmental Quality order
- A treatment or short-term activity exemption specified in Subsections ***401.05*** or ***080.02***, respectively
- A decree
- A compliance schedule, which allows a discharger to phase in, over time, compliance with water quality-based effluent limitations when new limitations are permitted for the first time

Point sources are not allowed to discharge pollutants exceeding levels set by these measures that would reduce water quality and threaten a designated beneficial use of the receiving water ***(400)***. Special standards are set for "mixing zones," small areas where effluent mixes with the receiving water. Exceeding basic water quality standards within mixing zones is permitted if standards are met outside of the zone ***(060)***.

C. Variances

Under certain circumstances, variances - or exceptions - to meeting water quality standards can be granted ***(260)***. Sometimes, based on site-specific characteristics or natural conditions, the numeric water quality criteria can be modified to better reflect particular situations ***(275)***. For example, aquatic species may have developed a higher tolerance for a certain pollutant in a specific location, allowing for higher levels under the standards. Site-specific criteria are described for waters discharged from dams, reservoirs, and hydroelectric facilities (***276***; see ***300*** for additional criteria linked to gas supersaturation), and for other locations throughout Idaho ***(278 - 286)***.

D. Wastewater Treatment

Section ***401*** describes the pollution control measures, degree of treatment, treatment requirements and exceptions, operation standards, and recordkeeping required of point sources. Public wastewater treatment facilities are classified by potential health risk indicators, including complexity, size, and volume and variability in raw waste treated ***(403)***. Operators for wastewater systems, treatment facilities, and collection systems must be certified ***(404 - 412)***.

E. Sewage Treatment

Sewage treatment requirements are also described for point source sewage wastewater discharge ***(420)***, point source non-sewage wastewater discharge ***(440)***, subsurface sewage discharge ***(460)***, and waste disposal and injection wells ***(480)***.

F. Wastewater and Sludge Re-Use

Some wastewater by-products can be recycled or reapplied for beneficial purposes. Applying wastewater or recharge waters as an alternate source for irrigation, for example, requires a Land Application Permit (***600*** and Title 01, see also Chapter 17 of the Idaho Administrative Rules, "Land Application Permit Rules"). Sludge, sometimes called biosolids, can also be used to augment, or enrich, soil and requires an DEQ-approved sludge plan ***(650)***.

VII. Additional Water Quality Safeguards - Hazardous Materials and Petroleum

The rules also specify additional measures to protect water quality pertaining to hazardous and deleterious material storage ***(800)***, oil-filled electric equipment ***(849)***, hazardous material spills ***(850)***, and petroleum releases ***(851 - 852)***.